INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Frank O'Bannon
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100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

June 17, 2003

TO: Interested Parties / Applicant

RE: **Heritage Slag Products, LLC. 089-17185-00481**

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within (18) eighteen days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) the date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for consideration at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

PART 70 SIGNIFICANT SOURCE MODIFICATION
OFFICE OF AIR QUALITY

Heritage Slag Products, LLC
a Contractor of Ispat Inland Inc.
3210 Watling Street
East Chicago, Indiana 46312

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 089-17185-00481	
Issued by: **Original signed by** Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: **June 17, 2003**

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SECTION A SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the emission units contained in conditions A.1, A.3 and A.4 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary slag crushing and sizing operation.

Responsible Official:	Kenneth Robinson
Source Address:	3210 Watling Street, East Chicago, IN 46312
Mailing Address:	5400 West 86th Street, Indianapolis, Indiana 46268
Phone Number:	(317) 872 - 6010
SIC Code:	3295
County Location:	Lake
County Status:	Nonattainment for PM10, Ozone and SO_2 Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under Emission Offset Rules and PSD; Major Source, Section 112 of the Clean Air Act 1 of the 28 Major PSD Source Categories

A.2 Part 70 Source Definition [326 IAC 2-7-1(22)]

Ispat Inland, Inc. is an integrated steel mill consists of a source with on-site contractors:

(a) Ispat Inland, Inc. (Plant ID 089-00316), the primary operation, is located at, 3210 Watling Street, East Chicago, Indiana and

(b) Heritage Slag Products, LLC (Plant ID 089-00481), the on-site contractor (a slag crushing and sizing operation) , is located at 3210 Watling Street, East Chicago, Indiana.

IDEM has determined that Ispat Inland, Inc. and Heritage Slag Products, LLC are under the common control of Ispat Inland Inc. These two plants are considered one source due to contractual control. Therefore, the term “source” in the Part 70 documents refers to both Ispat Inland, Inc. and Heritage Slag Products, LLC as one source.

Separate Part 70 permits will be issued to Ispat Inland, Inc. and Heritage Slag Products, LLC., solely for administrative purposes.

A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

One (1) slag crushing and sizing operation capacity: 400 tons of steel mill slag per hour, consisting of:

(a) One (1) Grizzly Hopper (GH-1), capacity: 400 tons of steel mill slag per hour.

(b) One (1) Primary Crusher (CR-1), capacity: 200 tons of steel mill slag per hour.

(c) One (1) Secondary Crusher (CR-2), capacity: 200 tons of steel mill slag per hour.

(d) One (1) 3-deck Sizing Screen (SS-3) with water spray, capacity: 400 tons of steel mill slag per hour.

(e) One (1) Conveyor 1 (CO-1), capacity: 400 tons of steel mill slag per hour.

(f) One (1) Conveyor 2 (CO-2), capacity: 175 tons of steel mill slag per hour.

(g) One (1) Conveyor 3 (CO-3), capacity: 125 tons of steel mill slag per hour.

(h) One (1) Conveyor 4 (CO-4), capacity: 50 tons of steel mill slag per hour.

(i) One (1) Conveyor 5 (CO-5), capacity: 200 tons of steel mill slag per hour.

(j) One (1) Conveyor 6 (CO-6), capacity: 250 tons of steel mill slag per hour.

(k) One (1) Conveyor 7 (CO-7), capacity: 200 tons of steel mill slag per hour.

(l) One (1) Diesel Powered Electric Generator (E-1), rated 1495 brake horse power, exhausted through Stack E-1.

(m) One (1) Diesel Fuel Storage Tank for generator (T-1), exhausted through stack T-1. capacity: 1000 gallons of diesel fuel.

(n) One (1) Diesel Fuel Storage Tank for mobile equipment (T-2), exhausting through stack T-2. capacity: 1000 gallons of diesel fuel.

A.4 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source does not currently have any insignificant activities, as defined in 326 IAC 2-7-1 (21) that have applicable requirements

A.5 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.3 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.4 Significant Source Modification [326 IAC 2-7-10.5(h)]

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

(a) The attached affidavit of construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.

(b) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.

(c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

(d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.

(e) In the event that the Part 70 application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:

(1) If the Part 70 draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Part 70 draft.

(2) If the Part 70 permit has gone through final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go through a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Part 70 permit at the time of issuance.

(3) If the Part 70 permit has gone through public notice, but has not gone through final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed Part 70 permit, and the Title V permit will issued after EPA review.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) when operation begins, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Quality
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.

A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Quality
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.6 Fugitive Dust Emissions [326 IAC 6-1-11.1]

Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:

(a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).

(b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).

(c) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).

(d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.

(e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.

(f) There shall be a zero (0) percent frequency of visible emission observations of a material

during the inplant transportation of material by truck or rail at any time.

(g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).

(h) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.

(i) The PM_{10} emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.

(j) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).

(k) Any facility or operation not specified in 326 IAC 6-1-11.1(d) shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan, submitted on February 5, 2003.

C.7 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.8 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

Testing Requirements [326 IAC 2-7-6(1)]

C.9 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

(a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Quality
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ*)* not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

If required by Section D, all monitoring and record keeping requirements shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.13 Compliance Response Plan - Preparation, Implementation, Records, and Reports[326 IAC 2-7-5] [326 IAC 2-7-6]

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or

If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring

parameter with respect to normal, and the results of the actions taken up to the time of notification.

Failure to take reasonable response steps shall constitute a violation of the permit.

(c) The Permittee is not required to take any further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.

(d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.

(e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.14 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967
Northwest Regional Office telephone number: 219-881-6712
Northwest Regional Office Facsimile Number: 219-881-6745

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Quality
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification, which shall be submitted by the Permittee, does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of

the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.16 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

(a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) The reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Quality
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

One (1) slag crushing and sizing operation capacity: 400 tons of steel mill slag per hour, consisting of:

(a) One (1) Grizzly Hopper (GH-1), capacity: 400 tons of steel mill slag per hour.

(b) One (1) Primary Crusher (CR-1), capacity: 200 tons of steel mill slag per hour.

(c) One (1) Secondary Crusher (CR-2), capacity: 200 tons of steel mill slag per hour.

(d) One (1) 3-deck Sizing Screen (SS-3) with water spray, capacity: 400 tons of steel mill slag per hour.

(e) One (1) Conveyor 1 (CO-1), capacity: 400 tons of steel mill slag per hour.

(f) One (1) Conveyor 2 (CO-2), capacity: 175 tons of steel mill slag per hour.

(g) One (1) Conveyor 3 (CO-3), capacity: 125 tons of steel mill slag per hour.

(h) One (1) Conveyor 4 (CO-4), capacity: 50 tons of steel mill slag per hour.

(i) One (1) Conveyor 5 (CO-5), capacity: 200 tons of steel mill slag per hour.

(j) One (1) Conveyor 6 (CO-6), capacity: 250 tons of steel mill slag per hour.

(k) One (1) Conveyor 7 (CO-7), capacity: 200 tons of steel mill slag per hour.

(l) One (1) Diesel Powered Electric Generator (E-1), rated 1495 brake horse power, exhausted through Stack E-1.

(m) One (1) Diesel Fuel Storage Tank for generator (T-1), exhausted through stack T-1. capacity: 1000 gallons of diesel fuel.

(n) One (1) Diesel Fuel Storage Tank for mobile equipment (T-2), exhausting through stack T-2. capacity: 1000 gallons of diesel fuel.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Emission Offset [326 IAC 2-3]

(a) The input of steel mill slag to the slag crushing and sizing operation shall not exceed 859,402 tons per twelve (12) consecutive month period. Compliance with this limit will assure that the PM and PM10 emissions from the slag crushing and sizing operation shall remain less than the significant level. Therefore, the requirements of 326 IAC 2-3 (Emission Offset) and 326 IAC 2-2 (PSD), do not apply.

(b) The total input of No. 2 diesel fuel oil to the diesel generator shall be limited to 226,780 gallons per twelve (12) consecutive month period. Compliance with this limit will assure that the NO_X emissions from the slag crushing and sizing operation shall remain less than the significant level. Therefore, the requirements of 326 IAC 2-2 (PSD), do not apply.

D.1.2 Nonattainment Area Particulate Limitations [326 IAC 6-1-2]

(a) Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations), the particulate

matter emissions from the slag crushing and sizing operation shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf) as determined by Method 5.

(b) Pursuant to 326 IAC 6-1-2 (a) and (g), the crushing, sizing, storing and transporting of mineral materials shall be limited to the following:

(1) All operations where the process is totally enclosed, and thus it is practical to measure the emissions therefrom, shall comply with the 0.03 grain per dry standard cubic feet per minute in 326 IAC 6-1-2 (a).

(2) In addition, 326 IAC 2, 326 IAC 5-1, and 326 IAC 6-4 shall apply in all cases to mineral aggregate operations.

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the crushing, for the screening and for the conveying operations.

Compliance Determination Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.4 Testing Requirements [326 IAC 2-7-6(1)] [326 IAC 2-1.1-11]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing when necessary to determine if these facilities are in compliance. If testing is required by IDEM, compliance with the opacity limits pursuant to 326 IAC 5-1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.1.5 Lake County Fugitive Particulate Matter Control Requirements [326 IAC 6-1-11.1]

Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), compliance with the opacity limits specified in Condition C.6 shall be achieved by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan (FDCP), dated February 5, 2003. If it is determined that the control procedures specified in the FDCP do not demonstrate compliance with the fugitive emission limitations, IDEM, OAQ may request that the FDCP be revised and submitted for approval.

Opacity from the activities shall be determined as follows:

(a) Batch Transfer
The average instantaneous opacity shall consist of the average of three (3) opacity readings taken five (5) seconds, ten (10) seconds, and fifteen (15) seconds after the end of one (1) batch loading or unloading operation. The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume.

(b) Continuous Transfer
The opacity shall be determined using 40 CFR 60, Appendix A, Method 9. The opacity readings shall be taken at least four (4) feet from the point of origin.

(c) Wind Erosion from Storage Piles
The opacity shall be determined using 40 CFR 60, Appendix A, Method 9, except that the opacity shall be observed at approximately four (4) feet from the surface at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plum and at approximately right angles to the plume. The limitations may not apply during periods when application of fugitive particulate control measures are either ineffective or unreasonable due to sustained very high wind speeds. During such periods, the company must continue to implement all reasonable fugitive particulate control measures and maintain records documenting the application of measures and the basis for a claim that meeting the opacity limitation was not reasonable given prevailing wind conditions.

(d) Wind Erosion from Exposed Areas
The opacity shall be determined using 40 CFR 60, Appendix A, Method 9.

(e) Material Transported by Truck or Rail
Compliance with this limitation shall be determined by 40 CFR 60, Appendix A, Method 22, except that the observation shall be taken at approximately right angles to the prevailing wind from the leeward side of the truck or railroad car. Material transported by truck or rail that is enclosed and covered shall be considered in compliance with the inplant transportation requirement.

(f) Material Transported by Front End Loader or Skip Hoist
Compliance with this limitation shall be determined by the average of three (3) opacity readings taken at five (5) second intervals. The three (3) opacity readings shall be taken as follows:

(1) The first will be taken at the time of emission generation.

(2) The second will be taken five (5) seconds later.

(3) The third will be taken five (5) seconds later or ten (10) seconds after the first.

The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand at least fifteen (15) feet from the plume approximately and at right angles to the plume. Each reading shall be taken approximately four (4) feet above the surface of the roadway or parking area.

(g) Material Processing Limitations
Compliance with all opacity limitations from material processing equipment shall be determined using 40 CFR 60, Appendix A, Method 9. Compliance with all visible emissions limitations from material processing equipment shall be determined using 40 CFR 60, Appendix A, Method 22. Compliance with all particulate matter limitations from material processing equipment shall be determined using 40 CFR 60, Appendix A, Method 5 or 17.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.6 Visible Emissions Notations

(a) Visible emission notations of the crushing, the screening and conveying operations shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C-Compliance Response Plan-Preparation, Implementation, Records and Reports shall be considered a violation of this permit.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.7 Record Keeping Requirements

(a) To document compliance with Condition D.1.6, the Permittee shall maintain records of daily visible emission notations for the crushing, the screening and conveying operations.

(b) To document compliance with Condition D.1.1 (a), the Permittee shall maintain records at the plant of the steel mill slag input.

(b) To document compliance with Conditions D.1.1 (b), the Permittee shall maintain the following records:

(1) Start-up date of operations,

(2) Actual No. 2 diesel fuel oil usage

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.8 Reporting Requirements

Quarterly summary to document compliance with operation condition numbers D.1.1 (a) and D.1.1 (b) shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter or six (6) month period being reported. These reports shall include the monthly input of steel mill slag, the amount of No. 2 diesel fuel oil used each month. All records and reports shall use calendar months.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name: Heritage Slag Products, LLC
Source Address: 3210 Watling Street, East Chicago, IN 46312
Mailing Address: 5400 West 86th Street, Indianapolis, Indiana 46268
Source Modification No.: 089-17185-00481

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

9 Test Result (specify)_____

9 Report (specify)_____

9 Notification (specify) _____

9 Affidavit (specify) _____

9 Other (specify)_____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Source Modification Quarterly Report

Source Name: Heritage Slag Products, LLC
Source Address: 3210 Watling Street, East Chicago, IN 46312
Mailing Address: 5400 West 86th Street, Indianapolis, Indiana 46268
Source Modification No.: 089-17185-00481
Facility: Crushing, screening, conveying and transporting steel mill slag
Parameter: Input of Steel Mill Slag
Limit: 859,402 tons per twelve (12) consecutive month period

YEAR:

Month	Tons of Slag	Tons of Slag	Tons of Slag
	This Month	Previous 11 Months	12 Month Total

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.
Deviation has been reported on:_____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Source Modification Quarterly Report

Source Name: Heritage Slag Products, LLC
Source Address: 3210 Watling Street, East Chicago, IN 46312
Mailing Address: 5400 West 86th Street, Indianapolis, Indiana 46268
Source Modification No.: 089-17185-00481
Facility: Diesel powered electric generator
Parameter: Gallons of No. 2. diesel fuel oil
Limit: total input of No. 2 diesel fuel oil to the diesel generator shall be limited to 226, 780 gallons per twelve (12) consecutive month period

Start-up Date of Operation: _____

YEAR:

Month	Gallons of Diesel Fuel This Month	Gallons of Diesel Fuel Previous 11 Months	Gallons of Diesel Fuel 12 Month Total

9 No deviation occurred in this month.

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Mail to: Permit Administration & Development Section
Office Of Air Quality
100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015
Company Name
Mailing Address
City, Indiana Zip Code

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.

2. I hold the position of _____ for _____.
(Title) (Company Name)

3. By virtue of my position with _____,I have personal
(Company Name)

knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of _____ .
(Company Name)

I hereby certify that Heritage Slag Products, LLC., 3210 Watling Street, East Chicago, IN 46312, has constructed the a stationary slag crushing and sizing operation in conformity with the requirements and intent of the construction permit application received by the Office of Air Quality on February 5, 2003 and as permitted pursuant to Source Modification No. 089–17185-00481 issued on

5. Additional (?operations/facilities) were constructed/substituted as described in the attachment to this document and were not made in accordance with the construction permit. (Delete this statement if it does not apply.)

Further Affiant said not.
I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

Signature

Date
STATE OF INDIANA)
)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of Indiana on this _____ day of _____, 20 _____ .
My Commission expires:

Signature

Name (typed or printed)

June 17, 2003

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Significant Source Modification.

Source Background and Description

Source Name:	Heritage Slag Products, LLC
Source Location:	3210 Watling Street, East Chicago, IN 46312
County:	Lake
SIC Code:	3295
Operation Permit No.:	Considered one source with Ispat Inland, Inc.
Significant Source Modification No.:	089-17185-00481
Permit Reviewer:	Teresa Freeman

The Office of Air Quality (OAQ) has reviewed a modification application from Heritage Slag Products, LLC, relating to the construction of the following emission units and pollution control devices:

One (1) slag crushing and sizing operation capacity: 400 tons of steel mill slag per hour, consisting of:

(a) One (1) Grizzly Hopper (GH-1), capacity: 400 tons of steel mill slag per hour.

(b) One (1) Primary Crusher (CR-1), capacity: 200 tons of steel mill slag per hour.

(c) One (1) Secondary Crusher (CR-2), capacity: 200 tons of steel mill slag per hour.

(d) One (1) 3-deck Sizing Screen (SS-3) with water spray, capacity: 400 tons of steel mill slag per hour.

(e) One (1) Conveyor 1 (CO-1), capacity: 400 tons of steel mill slag per hour.

(f) One (1) Conveyor 2 (CO-2), capacity: 175 tons of steel mill slag per hour.

(g) One (1) Conveyor 3 (CO-3), capacity: 125 tons of steel mill slag per hour.

(h) One (1) Conveyor 4 (CO-4), capacity: 50 tons of steel mill slag per hour.

(i) One (1) Conveyor 5 (CO-5), capacity: 200 tons of steel mill slag per hour.

(j) One (1) Conveyor 6 (CO-6), capacity: 250 tons of steel mill slag per hour.

(k) One (1) Conveyor 7 (CO-7), capacity: 200 tons of steel mill slag per hour.

(l) One (1) Diesel Powered Electric Generator (E-1), rated 1495 brake horse power, exhausted through Stack E-1.

(m) One (1) Diesel Fuel Storage Tank for generator (T-1), exhausted through stack T-1. capacity: 1000 gallons of diesel fuel.

(n) One (1) Diesel Fuel Storage Tank for mobile equipment (T-2), exhausting through stack T-2. capacity: 1000 gallons of diesel fuel.

History

On February 5, 2003, Heritage Slag Products, LLC submitted an application to the OAQ requesting to add a new steel slag crushing and sizing operation within the boundaries of Ispat Inland, Inc. steel mill. Ispat Inland, Inc. has applied for a Part 70 permit on December 6, 1996 (T 089-6577-00316).

Source Definition

Ispat Inland, Inc. is an integrated steel mill consists of a source with on-site contractors :

(a) Ispat Inland, Inc. (Plant ID 089-00316), the primary operation, is located at, 3210 Watling Street, East Chicago, Indiana and

(b) Heritage Slag Products, LLC (Plant ID 089-00481), the on-site contractor (a slag crushing and sizing operation), is located at 3210 Watling Street, East Chicago, Indiana.

IDEM has determined that Ispat Inland, Inc. and Heritage Slag Products, LLC are under the common control of Ispat Inland Inc. These two plants are considered one source due to contractual control. Therefore, the term "source" in the Part 70 documents refers to both Ispat Inland, Inc. and Heritage Slag Products, LLC as one source.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
E-1	Generator	15	0.250	unknown	unknown
T-1	Storage tank	6	0.167	unknown	ambient
T-2	Storage tank	5	0.167	unknown	ambient

Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on February 5, 2003.

Emission Calculations

See Appendix A of this document for detailed emissions calculations in pages 1 through 10.

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical

or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	greater than 100
PM-10	greater than 100
SO_2	less than 40
VOC	less than 25
CO	less than 100
NO_x	less than 100

HAP's	Potential To Emit (tons/year)
combustion only	less than 10
TOTAL	less than 10

County Attainment Status

The source is located in Lake County.

Pollutant	Status
PM-10	Attainment
SO_2	Marginal Nonattainment
NO_2	Attainment
Ozone	Severe Nonattainment
CO	Attainment
Lead	Attainment or unclassifiable

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as nonattainment for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

(b) Lake County has been classified as nonattainment for sulfur dioxide. Therefore, these emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

(c) Fugitive Emissions
Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	greater than 100
PM-10	greater than 100
SO_2	greater than 100
VOC	greater than 25
CO	greater than 100
NOx	greater than 25

(a) This existing source is a major stationary source because an attainment regulated pollutant is emitted at a rate of 100 tons per year or more, and it is one of the 28 listed source categories.

(b) These emissions are based upon the 2001 emission statement for Ispat Inland, Inc.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

Pollutant	**PM** (tons/yr)	**PM_{10}** (tons/yr)	**SO_2** (tons/yr)	**VOC** (tons/yr)	**CO** (tons/yr)	**NO_X** (tons/yr)
slag crushing and sizing operation	<23.3	<13.3	--	--	--	--
Diesel Generator 1495 b-hp	1.7	1.7	1.51	1.85	4.92	24.3
Net Emissions	<25	<15	1.51	1.85	4.92	24.3
Offset Significant Level	25	15	40	25	100	40

The input of slag to the crushing and screening facilities shall not exceed 859,402 tons per year, equivalent to PM emissions after controls of less than twenty-five (25) tons per year including fugitive emissions. This input limit will also assure that the PM_{10} emissions are less than fifteen (15) tons per year. This throughput limit was calculated as follows from the ratio of the limiting case (PM):

Offset Sig. Level :

(25 TPY- 1.7 TPY) / 95 TPY PTE after controls * 400 TPH * 8,760 hrs/yr = < 859,402 TPY

This modification to an existing major stationary source is not major because the emissions increase is less than the Emission Offset significant levels. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

Federal Rule Applicability

(a) This crushing and screening of slag is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, 40 CFR 60.670 through 60.676, Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants) since the slag material being crushed is not a nonmetallic mineral pursuant to 40 CFR 60.671.

(b) This crushing and screening operation of slag is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, 40 CFR 60.380 through 60.686, Subpart LL (Standards of Performance for Metallic Mineral Processing Plants) since the

operations are not producing metallic mineral concentrates from ore. None of these slag crushing and/or screening operations are performed in a mine or pit.

(c) The storage tanks, known as T-1 and T-2, with a capacity of 1000 gallons of diesel fuel each are not subject to 40 CFR 60.110b, Subpart Kb since the capacity is less than 40 cubic meters.

(d) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.

State Rule Applicability - Entire Source

326 IAC 2-3 (Emission Offset)

This modification to an existing major stationary source is not major because the emissions increases are less than the Emission Offset significant levels. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

(a) The input of steel mill slag to the slag crushing and sizing operation shall not exceed 859,402 tons per twelve (12) consecutive month period. Compliance with this limit will assure that the PM and PM10 emissions from the slag crushing and sizing operation shall remain less than the significant level. Therefore, the requirements of 326 IAC 2-3 (Emission Offset) and 326 IAC 2-2 (PSD), do not apply.

(b) The total input of No. 2 diesel fuel oil to the diesel generator shall be limited to 226,780 gallons per twelve (12) consecutive month period. Compliance with this limit will assure that the NO_X emissions from the slag crushing and sizing operation shall remain less than the significant level. Therefore, the requirements of 326 IAC 2-2 (PSD), do not apply.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of NO_X and one hundred (100) tons per year of PM_{10} in Lake County. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of twenty percent (20%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-1-2 (Nonattainment Area Particulate Limitations)

The facilities listed in this permit are subject to 6-1-2 because the source is located in a nonattainment area for particulate matter, and has the potential to emit 100 tons or more of particulate matter per year. The facilities shall not discharge to the atmosphere any gases which contain particulate matter in excess of 0.03 grains per dry standard cubic foot.

326 IAC 6-1-2 (g) (Nonattainment Area Particulate Limitations)

Pursuant to 326 IAC 6-1-2 (g) The crushing, sizing, storing and transporting of mineral materials shall be limited to the following:

(a) All mineral aggregate operations, where the process is totally enclosed, and thus it is practical to measure the emissions therefrom, shall comply with the 0.03 grain per dry standard cubic feet per minute in 326 IAC 6-1-2 (a).

(a) In addition, 326 IAC 2, 326 IAC 5-1, and 326 IAC 6-4 shall apply in all cases to mineral aggregate operations.

326 IAC 6-1-10.1 (Lake County PM10 Emission Requirements)

There are no specific emissions limitations established in 326 IAC 6-1-10.1 for the facilities in this permit. Therefore, the requirements of 326 IAC 6-1-10.1 do not apply to these facilities.

326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements)

Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from the new emission unit stacks and fugitive sources shall not exceed the following limitations:

(a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).

(b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).

(c) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).

(d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.

(e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.

(f) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.

(g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).

(h) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.

(i) The PM_{10} emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.

(j) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).

(k) Any facility or operation not specified in 326 IAC 6-1-11.1(d) shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan, submitted on February 5, 2003.

326 IAC 6-1-11.2 (Lake County Particulate Matter Contingency Measures)

The source is subject to 326 IAC 6-1-11.2 because it is subject to the requirements of 326 IAC 6-1-11.1 and 326 IAC 6-1-10.1(d). Pursuant to this rule, the source shall comply with parts (h), (i), (k), (l), (m), (o), (p) and (q) of this rule.

326 IAC 6-3 (Particulate Emissions Limitations for Process Operations)

The source is not subject to the requirements of 326 IAC 6-3 because the plant is subject to the requirements of 326 IAC 6-1 (Nonattainment Particulate Emission Limitations). Pursuant to the applicability requirements (326 IAC 6-3-1(b)), if any limitation established by this rule is inconsistent with applicable limitations contained in 326 IAC 6-1 (Nonattainment Particulate Emission Limitations) or 326 IAC 12 (New Source Performance Standards), then the limitations contained in 326 IAC 6-1 or 326 IAC 12 prevail.

326 IAC 6-4 (Fugitive Dust Emissions)

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

326 IAC 7-1.1 (Sulfur dioxide emission limitations)

Since the diesel generator does not have the potential to emit twenty-five (25) tons per year or more of SO_2, this rule is not applicable.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this modification are as follows:

(a) The slag crushing and sizing operation has applicable compliance monitoring conditions as specified below:

(1) Visible emission notations of the crushing, the screening and conveying operations shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C-Compliance Response Plan-Preparation, Implementation, Records and Reports shall be

considered a violation of this permit.

Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 089-17185-00481.

Appendix A: Emission Calculations

Slag Processing

Company Name:	Heritage Slag Products
Address City IN Zip:	3210 Watling Street, East Chicago, IN 46312
SSM:	089-17185
Plt ID:	089-00481
Reviewer:	Teresa Freeman
Date:	04/10/03

*** * emissions before controls * ***

(TSP)

Storage			** see page 2 **					0.65	tons/yr	AP-42 Ch.11.2.3 (Fourth edition, no update)
Transporting			** see page 3 **					162.30	tons/yr	AP-42 Ch.13.2.2 (Supplement E, 9/98)
Loading & Unloadin	400	ton/hr x	0.00443	lb/ton	/ 2000 lb/ton x	8760	hr/yr =	7.76	tons/yr	AP-42 Ch.13.2.4 (Fifth edition, 1/95)
Crushing (primary)	200	ton/hr x	0.00504	lb/ton	/ 2000 lb/ton x	8760	hr/yr =	4.42	tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (secondar	200	ton/hr x	0.00504	lb/ton	/ 2000 lb/ton x	8760	hr/yr =	4.42	tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (tertiary)	0	ton/hr x	0.00504	lb/ton	/ 2000 lb/ton x	8760	hr/yr =	0.00	tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Screening	400	ton/hr x	0.0315	lb/ton	/ 2000 lb/ton x	8760	hr/yr =	55.19	tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Conveyor Transfer	400	ton/hr x	0.00294	lb/ton	/ 2000 lb/ton x	8760	hr/yr =	5.15	tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Total emissions before controls:								239.88	tons/yr	

* * emissions after controls * *

Storage	0.65	tons/yr x	10%	emitted after controls =	0.06	tons/yr
Transporting	162.30	tons/yr x	50%	emitted after controls =	81.15	tons/yr
Loading & Unloadin	7.76	tons/yr x	100%	emitted after controls =	7.76	tons/yr
Crushing (primary)	4.42	tons/yr x	10%	emitted after controls =	0.44	tons/yr
Crushing (secondar	4.42	tons/yr x	0%	emitted after controls =	0.00	tons/yr
Crushing (tertiary)	0.00	tons/yr x	0%	emitted after controls =	0.00	tons/yr
Screening	55.19	tons/yr x	10%	emitted after controls =	5.52	tons/yr
Conveying	5.15	tons/yr x	10%	emitted after controls =	0.52	tons/yr
Total emissions after controls:					95.45	tons/yr

Heritage Slag Products
East Chicago, Indiana

* * fugitive vs. nonfugitive * *

Storage	0.65	tons/yr x	10%	emitted after controls =	0.06	tons/yr
Transporting	162.30	tons/yr x	50%	emitted after controls =	81.15	tons/yr
Loading / Unloading	7.76	tons/yr x	100%	emitted after controls =	7.76	tons/yr
Total fugitive emissions:					88.98	tons/yr
Crushing (primary)	4.42	tons/yr x	10%	emitted after controls =	0.44	tons/yr
Crushing (secondar	4.42	tons/yr x	0%	emitted after controls =	0.00	tons/yr
Crushing (tertiary)	0.00	tons/yr x	0%	emitted after controls =	0.00	tons/yr
Screening	55.19	tons/yr x	10%	emitted after controls =	5.52	tons/yr
Conveying:	5.15	tons/yr x	10%	emitted after controls =	0.52	tons/yr
Total nonfugitive emissions:					6.475	tons/yr

* * storage * *

Storage emissions, which result from wind erosion, are determined by the following calculations:

Ef =	1.7*(s/1.5)*(365-p)/235*(f/15)	
=	7.72	lb/acre/day
where s =	4	% silt content of material
p =	125	days of rain greater than or equal to 0.01 inches
f =	25	% of wind greater than or equal to 12 mph
D=	0.005	Density (1 cu.ft./211 lb)
ph=	15	mean pile height (ft)
Days=	365	Days per year pile is present

Ep (storage) =	(Ef*sc*D*Days)/(43560 sq.ft)/acre/ph		
=	0.65	tons/yr	
where sc =	30,000	tons storage capacity	Finished Product Only

Heritage Slag Products
East Chicago, Indiana

SSM 089-17185
Plt ID 089-00481

Four Axle Dump Truck

* * unpaved roads * *

The following calculations determine the amount of emissions created by unpaved roads,
based on 8760 hours of use and AP-42, Ch 13.2.2 (Supplement E, 9/98).
Two methods are provided for calculating emissions. The first does not consider natural mitigation due to precipitation.

20.00	trip/hr x	
0.5	mile/trip x	
2	(round trip) x	
8760	hr/yr =	175200 miles per year

Ef = {k*[(s/12)^0.8]*[(W/3)^b]/[(Mdry/0.2)^c]}*[(365-p)/365]
= 3.14 lb/mile

where k =	10	(particle size multiplier for PM-10) (k=10 for PM-30 or TSP)
s =	4	mean % silt content of unpaved roads
b =	0.5	Constant for PM-10 (b = 0.5 for PM-30 or TSP)
c =	0.4	Constant for PM-10 (c = 0.4 for PM-30 or TSP)
W =	30.00	tons average vehicle weight
Mdry =	2.5	surface material moisture content, % (default is 0.2 for dry conditions)
p =	125	number of days with at least 0.254mm of precipitation (See Figure 13.2.2-1)

3.14 lb/mi x 175200 mi/yr = 275.40 tons/yr
2000 lb/ton

Since the vehicle speed is less than 15 mph, the calculation includes the lbs/VMT multiplied by S/15, so the PM emissions are not over estimated.
S=Truck Speed in miles per hour

1.85 lbs/VMT1
162.30 Tons PM -10 PTE per year 2

Note: See AP-42 13.2.2 (Supplement E 9/98) for further information.

1 8.84/15*3.14 lb/mile = 1.85 lbs/VMT

2 1.85 lbs/VMT * 175,200 miles travelled per year/ 2000 lb/ton = 162.30 Tons PM-10 PTE per yr

Heritage Slag Products
East Chicago, Indiana

SSM 089-17185
Plt ID 089-00481

* * aggregate handling * *

The following calculations determine the amount of emissions created by truck
loading and unloading of aggregate, based on 8760 hours of use and AP-42, Ch 13.2.4 (Fifth edition, 1/95).

Ef =	k*(0.0032)* (U/5)^1.3/(M/2)^1.4		
=	0.00443	lb/ton	
where k =	0.74	(particle size multiplier)	
U =	10	mile/hr mean wind speed	
M =	2.5	% material moisture content	

Appendix A: Emission Calculations
Slag Processing

Company Name:	Heritage Slag Products
Address City IN Zip:	3210 Watling Street, East Chicago, IN 46312
Part 70:	089-17185
Plt ID:	089-00481
Reviewer:	Teresa Freeman
Date:	04/10/03

*** * emissions before controls * ***
PM-10

Storage			** see page 2 **					0.65	tons/yr	AP-42 Ch.11.2.3 (Fourth edition, no update)
Transporting			** see page 3 **					43.15	tons/yr	AP-42 Ch.13.2.2 (Supplement E, 9/98)
Loading & Unloadin	400	ton/hr x	0.0020	lb/ton	/ 2000 lb/ton x	8760	hr/yr =	3.54	tons/yr	AP-42 Ch.13.2.4 (Fifth edition, 1/95)
Crushing (primary)	200	ton/hr x	0.0024	lb/ton	/ 2000 lb/ton x	8760	hr/yr =	2.10	tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (secondary	200	ton/hr x	0.0024	lb/ton	/ 2000 lb/ton x	8760	hr/yr =	2.10	tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (tertiary)	0	ton/hr x	0.0024	lb/ton	/ 2000 lb/ton x	8760	hr/yr =	0.00	tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Screening	400	ton/hr x	0.015	lb/ton	/ 2000 lb/ton x	8760	hr/yr =	26.28	tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Conveyor Transfer	400	ton/hr x	0.0014	lb/ton	/ 2000 lb/ton x	8760	hr/yr =	2.45	tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Total emissions before controls:								80.27	tons/yr	

* * emissions after controls * *

Storage	0.65	tons/yr x	10%	emitted after controls =	0.06	tons/yr
Transporting	43.15	tons/yr x	50%	emitted after controls =	21.58	tons/yr
Loading & Unloadin	3.54	tons/yr x	100%	emitted after controls =	3.54	tons/yr
Crushing (primary)	2.10	tons/yr x	10%	emitted after controls =	0.21	tons/yr
Crushing (secondar	2.10	tons/yr x	10%	emitted after controls =	0.21	tons/yr
Crushing (tertiary)	0.00	tons/yr x	10%	emitted after controls =	0.00	tons/yr
Screening	26.28	tons/yr x	10%	emitted after controls =	2.63	tons/yr
Conveying	2.45	tons/yr x	10%	emitted after controls =	0.25	tons/yr
Total emissions after controls:					28.47	tons/yr

* * fugitive vs. nonfugitive * *

Storage	0.65	tons/yr x	10%	emitted after controls =	0.06	tons/yr
Transporting	43.15	tons/yr x	50%	emitted after controls =	21.58	tons/yr
Loading / Unloading	3.54	tons/yr x	100%	emitted after controls =	3.54	tons/yr
Total fugitive emissions:					25.18	tons/yr
Crushing (primary)	2.10	tons/yr x	10%	emitted after controls =	0.21	tons/yr
Crushing (secondary)	2.10	tons/yr x	10%	emitted after controls =	0.21	tons/yr
Crushing (tertiary)	0.00	tons/yr x	10%	emitted after controls =	0.00	tons/yr
Screening	26.28	tons/yr x	10%	emitted after controls =	2.63	tons/yr
Conveying:	2.45	tons/yr x	10%	emitted after controls =	0.25	tons/yr
Total nonfugitive emissions:					3.294	tons/yr

* * storage * *

Storage emissions, which result from wind erosion, are determined by the following calculations:

Ef =	1.7*(s/1.5)*(365-p)/235*(f/15)	
=	7.72	lb/acre/day
where s =	4	% silt content of material
p =	125	days of rain greater than or equal to 0.01 inches
f =	25	% of wind greater than or equal to 12 mph
D=	0.005	Density (1 cu.ft./211 lb)
ph=	15	mean pile height (ft)
Days=	365	Days per year pile is present

Ep (storage) =	(Ef*sc*D*Days)/(43560 sq.ft)/acre/ph	
=	0.65	tons/yr
where sc =	30,000	tons storage capacity

Finished Product Only

Heritage Slag Products
East Chicago, Indiana

SSM 089-17185
Plt ID 089-00481

Four Axle Dump Truck * * unpaved roads * *

The following calculations determine the amount of emissions created by unpaved roads,
based on 8760 hours of use and AP-42, Ch 13.2.2 (Supplement E, 9/98).

20.00	trip/hr x	(ASSUME 400 TONS PER HOUR ALL TRUCKS)	
0.5	mile/trip x		
2	(round trip) x		
8760	hr/yr =	175200	miles per year

Ef = {k*[(s/12)^0.8]*[(W/3)^b]/[(Mdry/0.2)^c]}*[(365-p)/365]

=	0.84	lb/mile
where k =	2.6	(particle
s =	4	mean % silt
b =	0.4	Constant
c =	0.3	Constant
W =	30.00	tons
Mdry =	2.5	surface
p =	125	number of

0.84 lb/mi x 175200 mi/yr = 73.22 tons/yr
2000 lb/ton

Since the vehicle speed is less than 15 mph, the calculation includes the lbs/VMT multiplied by S/15, so the PM emissions are not over estimated.
S=Truck Speed in miles per hour

0.49 lbs/VMT1
43.15 Tons PM -10 PTE per year 2

Note: See AP-42 13.2.2 (Supplement E 9/98) for further information.

1 8.84/15*0.84 lb/mile = 0.49 lbs/VMT

2 0.49 lbs/VMT * 175,200 miles travelled per year/ 2000 lb/ton = 43.15 Tons PM-10 PTE per yr

Heritage Slag Products
East Chicago, Indiana

* * aggregate handling * *

The following calculations determine the amount of emissions created by truck
loading and unloading of aggregate, based on 8760 hours of use and AP-42, Ch 13.2.4 (Fifth edition, 1/95).

Ef =	k*(0.0032)* (U/5)^1.3/(M/2)^1.4	
=	0.0020	lb/ton
where k =	0.35	(particle size multiplier)
U =	10	mile/hr mean wind speed
M =	2.5	% material moisture content

Heritage Slag Products
East Chicago, Indiana

B. Emissions calculated based on output rating (hp)

Heat Input Capacity Horsepower (hp)	Potential Throughput MMBtu
1495.0	33310.2

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMBtu	0.31	0.3100	0.2900	4.4100	0.3500	0.9500
Potential Emission in tons/yr	5.16	5.16	4.83	73.4	5.83	15.82

Methodology

Potential Througput (MMBtu) = hp *2543.5 (MMBtu/hr)*8760 hr/yr

Emission Factors are from AP42 (Supplement B 10/96), Table 3.3-2

Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] * 8760 hr/yr / (2,000 lb/ton)

*PM emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable.

Heat Input Capacity Horsepower (hp)	Potential Throughput MMBtu
1495.0	11027.3

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMBtu	0.31	0.31	0.2900	4.41	0.35	0.95
Limited Emission in tons/yr	1.71	1.71	1.60	24.3	1.93	5.24

Methodology

Limited Througput (MMBtu) = hp *2543.5 (MMBtu/hr)*2900 hr/yr
Limited Fuel Usage (gal/yr)=2900 hr/yr*78.2 gal/hr

Emission Factors are from AP42 (Supplement B 10/96), Table 3.3-2
Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] * 2900 hr/yr / (2,000 lb/ton)

*PM emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable.